Planning for Science Instruction in 2014-15 Published March 2014

A big question the Science Team at the ADE receives is "What is happening with the standards and how should I plan for next year?"

We currently do not have a firm timeline for when Arizona's State Board of Education will consider adopting new science standards. During the 2014-15 school year, Arizona's current Science Standard will still be in effect and the Science AIMS will still be administered Spring 2015 for grades 4, 8, and high school biology.

Although Arizona's science standards aren't changing for next year, this does not mean that you must continue teaching the way that you did when the standards were first adopted in 2004. We strongly encourage you to begin to shift your instruction to align to the vision of the *Framework for K-12 Science Education*. This change in instruction involves teaching at the intersection of the three dimensions: science and engineering practices, crosscutting concepts, and the core disciplinary ideas. Additionally, formative or classroom assessments of students should focus more on the students' abilities to perform at the intersection of these three dimensions, rather than for each dimension in isolation.

As you consider how you will modify your curriculum or instruction, think in terms of how to make better connections for your students.

- How can you make better connections between the content objectives (within and between Strands 4, 5, and 6) so they build deeper conceptual understanding for your students?
- How can you teach the current objectives in Strand 1 (inquiry processes) and expand them to the complexity of the eight science and engineering practices in the *Framework*.
- How can you then connect these eight practices to the content objectives (in Strands 4, 5, and 6) in our current standard?
- How can you use these practices to connect to the application objectives (in Strands 2 and 3) and the crosscutting concepts?
- How can you embed the AZCCRS Literacy Standards in Reading and Writing to develop a deeper content understanding and support the practices of constructing explanations, developing and using models, engaging in arguments from evidence, and obtaining, evaluating and communicating information in science?
- How can the performance expectations of the Next Generation Science Standards guide these changes towards making better connections?

Consider using the ADE curriculum analysis document posted on our website to help you analyze your lessons. If you are a K-5 teacher, you will find specific curriculum analysis documents aligned with our current science standard and topics to make your analysis easier. You have your work cut out for you. Moving science education to a deeper, more meaningful level with the constraints of our current standards and classroom resources is a challenge.

The ADE knows that we have a deep pool of talent in this state willing to rise to this challenge. As we all move forward together, the ADE has two different ways for you to get more involved in the process. We encourage you to apply to serve on a Resource Development and/or Review Team or to apply to serve on a Standards Development/Review team . Each of these teams are important for helping us move closer to new science standards in Arizona.